Chronic Disease Profile 2003-2004

Chronic Disease Epidemiology
February 2006

VERMONT
DEPARTMENT OF HEALTH

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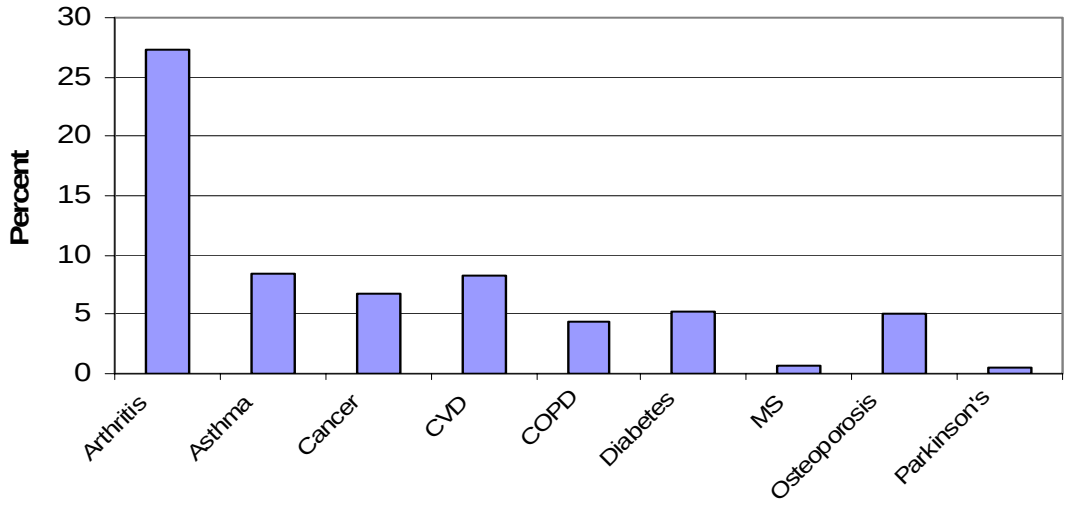
Introduction

The profile of diseases contributing most heavily to death, illness, and disability among Americans changed dramatically during the last century. Today, chronic diseases—such as cardiovascular disease (primarily heart disease and stroke), cancer, and diabetes—are among the most prevalent, costly, and preventable of all health problems. Seven of every 10 Americans who die each year, or more than 1.7 million people, die of a chronic disease. The prolonged course of illness and disability from such chronic diseases as diabetes, asthma, and arthritis results in extended pain and suffering and decreased quality of life for millions of Americans. Chronic, disabling conditions cause major limitations in activity for more than one in every 10 Americans, or 25 million people.

- Chronic Disease Overview, National Center for Chronic Disease Prevention and Health Promotion, Centers for Disease Control and Prevention. http://www.cdc.gov/nccdphp/overview.htm

Prevalence of Chronic Diseases – Vermont adults, 2003-2004



Arthritis	Asthma	Cancer	CVD	COPD	Diabetes	MS	Osteoporosis	Parkinson's
27.3%	8.5%	6.7%	8.2%	4.4%	5.3%	0.7%	5.0%	0.5%

Crude rates

The Chronic Disease Epidemiology program with the Vermont Department of Health is responsible for analysis, interpretation and presentation of health data related to chronic disease. To that end, we have created the "Vermont Chronic Disease Profile, 2004", which brings together data on selected chronic diseases contributing to the majority of the chronic disease burden of Vermonters. Both Vermont and United States data are presented in order to give the reader perspective on how Vermont is doing compared to the United States. Vermont data are also compared to Healthy Vermonters 2010 and Healthy People 2010 objectives where applicable.

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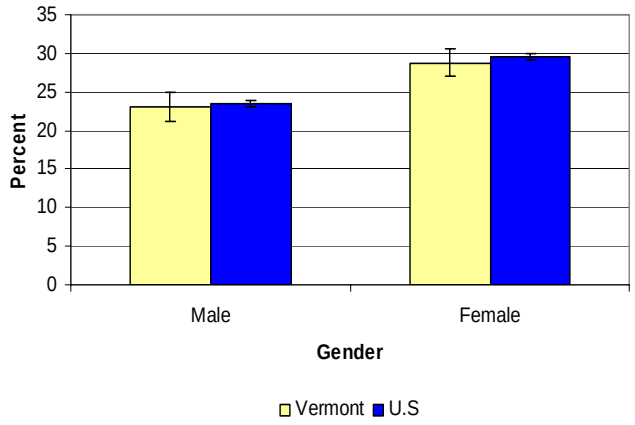
Arthritis

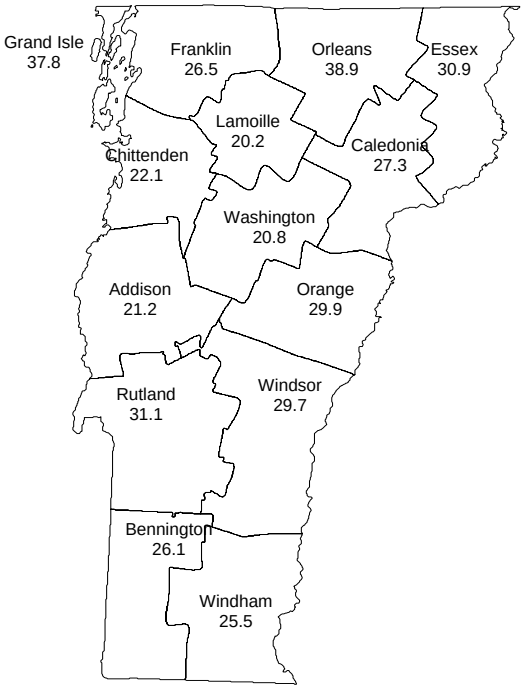
Definition: Ever been told by a doctor that had some form of arthritis, rheumatoid arthritis, gout, lupus, or fibromyalgia.



	VT 2003 Crude	VT 2003 Age-adjusted	U.S. 2003
Arthritis Prevalence - Adults	27.3%	26.0%	26.7%
Male	23.3%	23.0%	23.4%
Female	31.1%	28.7%	29.5%

Age adjustment distribution a.

Vermont County-level Prevalence



Counties with rates significantly higher than the state average: Orleans
Counties with rates significantly lower than the state average: Washington

Arthritis Self-Management Recommendations:

The disabling effects of arthritis are best addressed by early diagnosis and treatment. ***HV 2010 Goal: Increase the percentage of adults who have seen a health care professional for their arthritis or chronic joint symptoms.***

	VT 2003	U.S. 2003
Visited a Doctor for Joint Problems or Arthritis - Adults	72.2%	68.7%

Age adjustment distribution a.

Medical management, education, self-management, and exercise can reduce arthritis pain, slow the progression of the disease, and reduce disability. ***HP 2010 Goal: Increase the proportion of those with doctor-diagnosed arthritis who have had effective, evidence-based arthritis education as an integral part of the management of their condition.***

	VT 2003	U.S. 2003
Arthritis Education - Adults	12.4%	11.8%

Age adjustment distribution a.

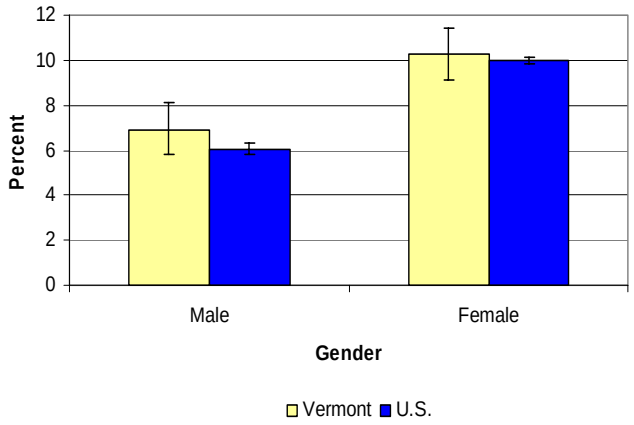
	VT 2003	U.S. 2003
Doctor ever advised losing weight to help arthritis - Adults	16.5%	18.1%
Doctor ever suggested physical activity to help arthritis - Adults	43.4%	40.5%

Age adjustment distribution a.

Data in **bold** indicate VT rates are significantly worse than the U.S. rate.
Data underlined indicate VT rates are significantly better than the U.S. rate.
Data in orange indicate VT has met the HV2010 or HP2010 goal.

Asthma

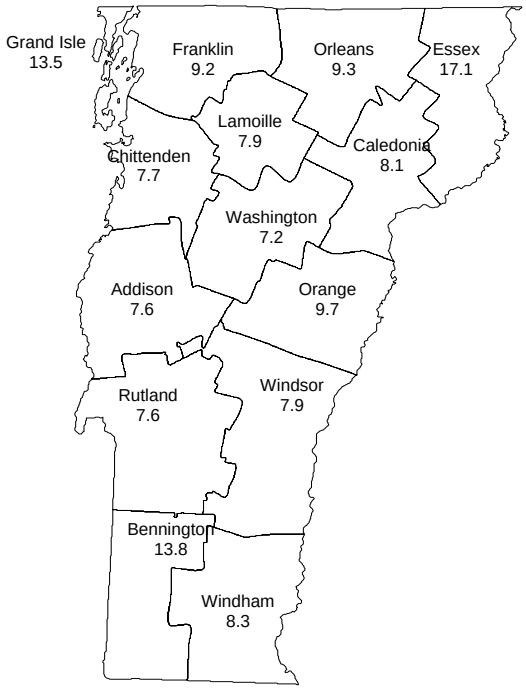
Definition: Ever been told by doctor they had asthma and currently have asthma.



	VT 2004 Crude	VT 2004 Age-adjusted	U.S. 2004
Asthma Prevalence - Adults	8.5%	8.6%	8.1%
Males	6.8%	6.9%	6.1%
Females	10.1%	10.2%	10.0%

Age adjustment distribution b.

Vermont County-level Prevalence



Counties with rates significantly higher than the state average: Bennington and Essex
No counties had rates significantly lower than the state average.

Asthma Self-Management Recommendations:

Asthma patients who are taught self-management skills are better able to control their disease before it becomes serious or life-threatening than patients who do not receive education. ***HP 2010 Goal: Increase the percentage of people with asthma who receive education about recognizing early signs and symptoms and how to respond.***

	VT 2004	U.S.	HP 2010
Asthma Self-Management Education - Adults	36.6%	-	30%

Age adjustment distribution b.

Effective management of asthma through written management plans has been shown to reduce the need for hospitalizations and emergency care, and enable people with asthma to lead healthier lives. Along with patient education, managing the disease involves avoiding allergens and irritants that trigger asthma episodes, taking appropriate medications, and working with a physician to more effectively monitor and control the disease. ***HV 2010 Goal: Increase the percentage of people with asthma who receive written management plans from their health care professional.***

	VT 2004	U.S.
Use of a Written Management Plan - Adults	20.7%	-

Age adjustment distribution b.

Data in **bold** indicate VT rates are significantly worse than the U.S. rate.
Data underlined indicate VT rates are significantly better than the U.S. rate.
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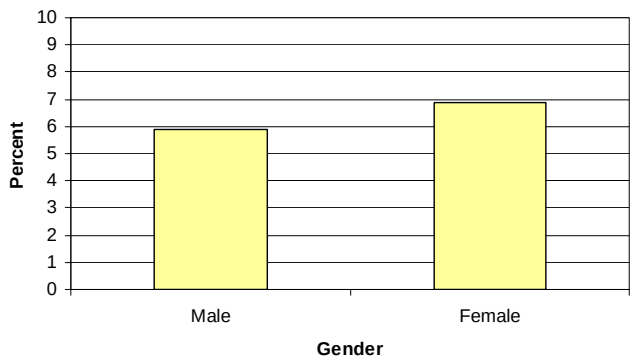
Cancer

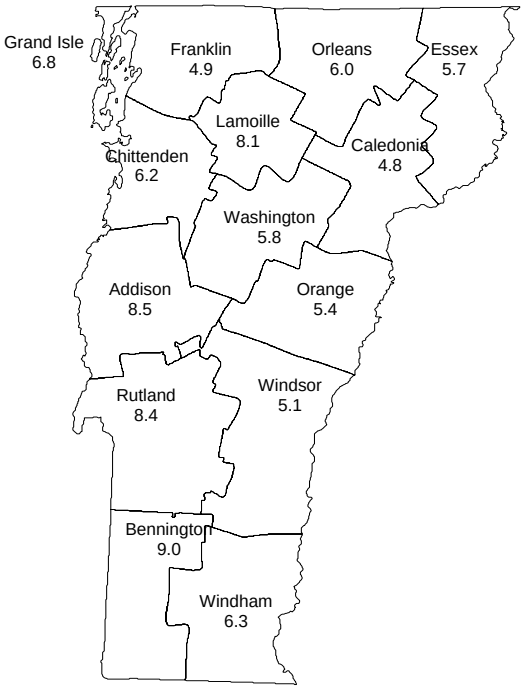
Definition: Ever been told by doctor they had cancer.



	VT 2004 Crude	VT 2004 Age-adjusted	U.S. 2004
Cancer Prevalence - Adults	6.7%	6.4%	-
Male	5.8%	5.9%	-
Female	7.5%	6.9%	-

Age adjustment distribution a.

Vermont County-level Prevalence



There are no significant differences between the county level estimates and the state estimate.

Colorectal Cancer Screening Recommendations:

Colorectal cancer kills more Vermonters than any other cancer except lung cancer. Colorectal cancer develops slowly, and routine use of recommended screening tests for people age 50 and older can detect cancer when it is most treatable. ***Screening recommendations for people over age 50: Fecal occult blood test (FOBT) every year, or sigmoidoscopy every 5 years, or FOBT annually and sigmoidoscopy every 5 years, or colonoscopy every 10 years, or double-contrast barium enema every 5-10 years.***

	VT 2004	U.S. 2004
Screening for Colorectal cancer* - Adults 50+	58.7%	51.6%

Age adjustment distribution c.
*Either had an FOBT in past year or sigmoidoscopy or colonoscopy within past 5 years.

Breast Cancer Screening Recommendations:

Early detection is the goal of breast cancer screening. If breast cancer is diagnosed at an earlier stage, the chances for survival are greater. Combined with clinical breast exam, a mammogram detects breast cancer early, at the time it is most treatable. ***HV 2010 Goal: Increase the percentage of women over 40 who have had a mammogram in the past two years.***

	VT 2004	U.S. 2004	HV 2010
Mammograms – Women 40+	74.8%	74.4%	70%

Age adjustment distribution d.

Cervical Cancer Screening Recommendations:

Vermont's incidence of cervical cancer is statistically worse than the U.S. as a whole. Early detection through the use of Pap tests and treatment of pre-cancerous lesions make deaths from cervical cancer almost entirely preventable. ***HV 2010 Goal: Increase the percentage of women over 18 who have had a Pap test in the preceding three years.***

	VT 2004	U.S. 2004	HV 2010
Pap test – Women 18+	88.1%	87.5%	90%

Age adjustment distribution b.

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Data underlined indicate VT rates are significantly better than the U.S. rate.
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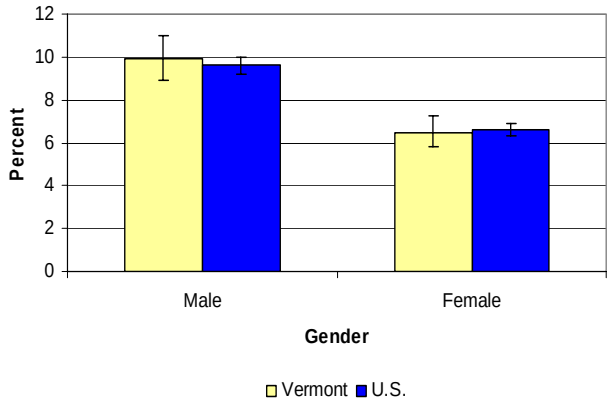
Cardiovascular Disease

Definition: Ever been told by a doctor that had either heart attack, myocardial infarction, angina, coronary heart disease, or stroke.



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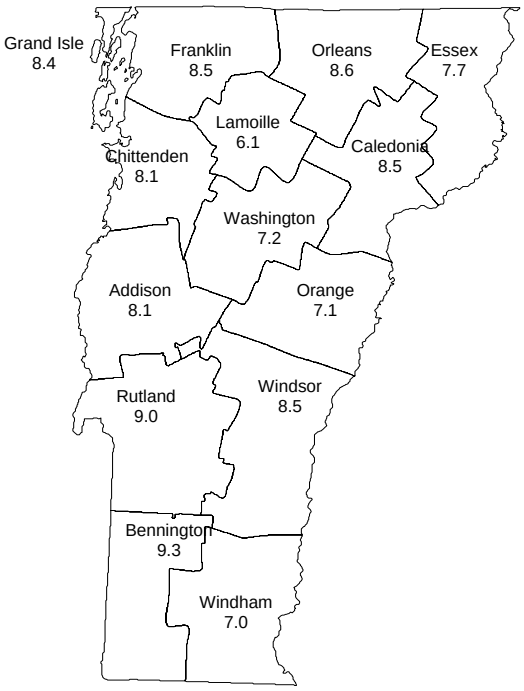
	VT 2004 Crude	VT 2004 Age-adjusted	U.S. 2003*
Cardiovascular Disease Prevalence - Adults	8.2%	8.1%	8.0%
Male	9.5%	9.9%	9.6%
Female	7.0%	6.5%	6.6%

Age adjustment distribution e.

Vermont County-level Prevalence



There are no significant differences between the county level estimates and the state estimate.

High blood pressure or high cholesterol are often precursors to cardiovascular disease.

	VT 2003	U.S. 2003
Ever told had high blood pressure – Adults	22.0%	25.5%
Ever told had high cholesterol - Adults	27.8%	30.4%

Age adjustment distribution b.

Cardiovascular Health Screening Recommendations:

Blood pressure and cholesterol checks diagnose cardiovascular disease early when preventive measures may reduce risks of dying from heart disease or stroke. ***HP 2010 Goal: Increase the percentage of Vermont adults who had their cholesterol checked within 5 years.***

	VT 2003	U.S. 2003	HP 2010
Cholesterol Checked - Adults	75.4%	73.5%	80%

Age adjustment distribution b.

*US data are from 25 states and 1 territory. The wording of the questions in Vermont in 2004 differed from the wording of the questions in the 2003 US CVD module

Data in **bold** indicate VT rates are significantly worse than the U.S. rate.
Data underlined indicate VT rates are significantly better than the U.S. rate.
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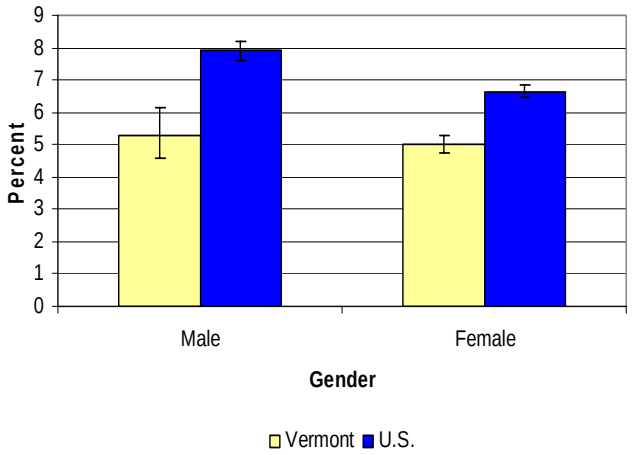
Diabetes

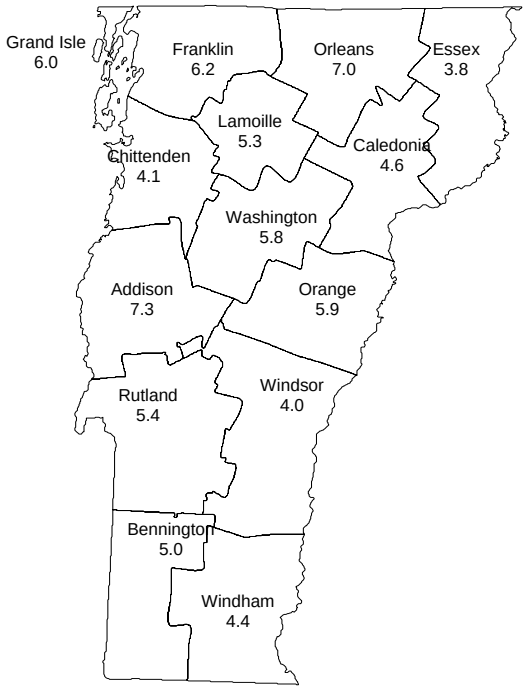
Definition: Ever been told by a doctor that they had diabetes (excluding females told only during pregnancy).



	VT 2004 Crude	VT 2004 Age-adjusted	U.S. 2004
Diabetes Prevalence - Adults	5.3%	5.1%	7.1%
Male	5.4%	5.3%	7.8%
Female	5.2%	5.0%	6.6%

Age adjustment distribution f.

Vermont County-level Prevalence



There are no significant differences between the county level estimates and the state estimate.

Diabetes Clinical Care Management Recommendations:

Diabetes is the leading cause of new cases of blindness in adults age 20 to 74. Appropriate screening by a well-trained health care professional can lead to treatment and follow-up care to prevent blindness. ***HV 2010 Goal: Increase the percentage of adults with diabetes who have an annual dilated eye exam.***

	VT 2004	U.S. 2004	HV 2010
Dilated Eye Exam – Adults	64.0%	61.8%	75%

Age adjustment distribution e.

The A1c test is used to monitor blood glucose in order to keep glucose levels as close to normal as possible. This helps to minimize the complications caused by chronically elevated glucose levels, such as progressive damage to body organs like the kidneys, eyes, cardiovascular system, and nerves. ***Patient Clinical Care Management Recommendation: Increase the percentage of people with diabetes who have an A1c test every 6 months.***

	VT 2004	U.S. 2004	Goal
A1c Test* - Adults	75.8%	68.8%	85%

Age adjustment distribution e.
*Reported 2 or more A1c tests in past 12 months.

Improved patient self-management skills (self-monitoring of blood glucose, foot checks, and diet control, etc…) can result in a reduction of diabetic complications. ***Patient Self-Management Recommendations: Increase the percentage of people with diabetes who receive formal diabetes education.***

	VT 2004	U.S. 2004	Goal
Diabetes education	56.6%	53.6%	60%

Age adjustment distribution e.

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Data underlined indicate VT rates are significantly better than the U.S. rate.
Data in orange indicate VT has met the HV2010 or HP2010 goal.

Healthy Lifestyle: Self-Management Recommendations

Overweight and Obesity

Being overweight substantially increases risk for many chronic diseases including high blood pressure, type 2 diabetes, osteoarthritis, heart disease and stroke, gallbladder disease, arthritis, sleep disturbances and breathing problems, and certain cancers including breast, prostrate, and colorectal cancer. Even modest weight loss (10 percent of body weight) by overweight individuals can decrease their risk for these diseases. Achieving and maintaining a healthy weight requires a balanced, reduced-calorie diet, and increased physical activity. ***HV 2010 Goal: Reduce the percentage of adults who are obese (as measured by BMI of 30 or more).***

	VT 2004	U.S. 2004	HV 2010
Overweight Prevalence - Adults	54.1%	60.2%	
Male	62.8%	68.2%	
Female	45.4%	52.3%	
Obese Prevalence – Adults	18.6%	23.5%	15%
Male	19.0%	23.9%	
Female	18.3%	23.0%	

Age adjustment distribution b.
*Overweight is defined as a BMI of 25 and greater.
**Obesity is defined as a BMI of 30 and greater.

Exercise

For people of all ages, physical activity improves health. Many of the diseases and disabling conditions associated with aging can be prevented, postponed, or eased with regular physical activity. It helps control weight and contributes to healthy bones, muscles, and joints. It also reduces the symptoms of anxiety and depression. ***HV 2010 Goal: Increase the percentage of adults who engage in moderate physical activity (at least 30 minutes per day/five days per week).***

	VT 2003	U.S. 2003	HV 2010
Adults Meeting Guidelines	55.3%	46.0%	30%
Male	56.0%	48.2%	
Female	55.0%	43.9%	

Age adjustment distribution b.

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Data underlined indicate VT rates are significantly better than the U.S. rate.
Data in orange indicate VT has met the HV2010 or HP2010 goal.

Nutrition

Eating more fruits and vegetables has a variety of health benefits, including a decreased risk for some types of cancer. These foods are generally low in fat, and by displacing high fat foods, can decrease the relative proportion of fat in the diet. In the past, nutrition experts have urged five servings of fruits and vegetables per day. ***HV 2010 Goals: Increase the percentage of adults who report eating at least two daily servings of fruit and three daily servings of vegetables.***

	VT 2003	U.S. 2003	HV 2010
Adults Meeting Fruit Guidelines	41.1%	32.1%	75%
Male	35.2%	27.8%	
Female	46.6%	36.1%	
Adults Meeting Vegetable Guidelines	30.8%	25.1%	50%
Male	23.4%	20.3%	
Female	37.7%	29.6%	

Age adjustment distribution b.

Tobacco

The Surgeon General's 2004 report states that smoking harms nearly every organ in the body. Smoking causes coronary heart disease, cancer, and contributes to asthma. Smoking damages the immune system, meaning the body's ability to fight off infection and disease is diminished. Smoking during pregnancy is the single most important preventable risk factor for low birth weight in Vermont. ***HV 2010 Goal: Reduce the percentage of adults who smoke cigarettes.***

	VT 2004	U.S. 2004	HV 2010
Current Smokers - Adults	20.2%	20.7%	12%
Male	21.7%	22.6%	
Female	18.7%	18.8%	

Age adjustment distribution b.

Alcohol

Adverse health effects that are associated with alcohol-exposed pregnancies include miscarriage, premature delivery, low birth weight, sudden infant death syndrome, and prenatal alcohol-related conditions (e.g., fetal alcohol syndrome and alcohol-related neurodevelopmental disorders). Alcohol also increases the risk of developing Chronic Liver Disease and some types of cancer. ***HP 2010 Goal: Decrease the number of adults who report binge drinking (having greater or equal to 5 drinks on one or more occasions) during the previous month.***

	VT 2004	U.S. 2004	HP 2010
Binge Drinking - Adults	**16.8%**	14.3%	6%
Male	**24.8%**	22.1%	
Female	8.9%	7.7%	

Age adjustment distribution b.

Data Sources

All data for this report were obtained from the 2003-2004 Behavioral Risk Factor Surveillance System.

Behavioral Risk Factor Surveillance System (BRFSS): Since 1990, Vermont and 49 other states and three territories have tracked risk behaviors using a telephone survey of adults (age 18+) called the Behavioral Risk Factor Survey. These data are self-reported and therefore may differ from information obtained from records of health-care providers. The sample is also limited to adults with telephones. Because there is variation in the content of the questionnaire between states, U.S. estimates, in some cases, may represent a subset of all states. *Suggested Citation: Behavioral Risk Factor Surveillance System Survey Data*. Atlanta, Georgia: U.S. Department of Health and Human Services, Centers for Disease Control and Prevention, 2003-2004.
http://www.cdc.gov/brfss/index.htm

Indications of Progress

Where applicable, Vermont data are compared with the following indicators: Healthy Vermonters 2010, Healthy People 2010, and Indicators for Chronic Disease Surveillance. Progress is also discussed in relationship to the goals of the Vermont Blueprint for Health (see descriptions as follows).

Healthy People 2010 (HP 2010): Healthy People 2010 is a set of health objectives for the Nation to achieve over the first decade of the new century. It has been used by many different people, states, communities, professional organizations, and others to develop programs to improve health.
http://www.healthypeople.gov/

Healthy Vermonters 2010 (HV 2010): Healthy Vermonters goals were selected from HP 2010 goals, and identify health priorities for Vermont.
http://www.healthyvermonters.info/admin/pubs/hv2010/hv2010.shtml

Vermont Blueprint for Health: The vision of the Vermont Blueprint for health is that Vermont will have a comprehensive, proactive system of care that improves the quality of life for people with or at risk for chronic conditions. A major area of emphasis in the Blueprint is that Vermonters with chronic conditions will be effective managers of their own health. Objectives consistent with this goal of self management are highlighted in this report. Objectives consistent with appropriate screening and clinical care management are also noted.
http://www.healthyvermonters.info/dcb/052004.shtml

Technical Notes and Definitions

Prevalence: Prevalence is defined as the number of current cases per the population at risk at a certain point in time or period. Rates in this report are for the periods of either 2003 or 2004.

Statistical Significance: Because of random variability around a trend or point, rates observed at any given time are best considered estimates of the underlying or true rate. Confidence intervals are calculated to set a range of values, above and below the estimate that likely contains the true rate. (Confidence intervals are shown as error bars on graphs in this report and are calculated at the 95% level). If the confidence intervals of two groups (such as males and females, or Vermont and the U.S.) do not overlap, we use this as a conservative test that the difference is statistically significant. Data presented in tables are coded based on whether the Vermont rate is significantly different from the U.S. rate (bold = Vermont rate is better, underlined = Vermont rate is worse), and Vermont data in orange indicate that Vermont has met the Healthy Vermonter 2010 or Healthy People 2010 goal.

Crude and Age Adjusted Rates: Age adjustment is usually done when comparing two or more populations, particularly when they have different age structures. Age adjustment, using the direct method, is the application of age-specific rates in a population of interest to a standardized age distribution to eliminate differences in observed rates that result from age differences in the population composition. Age adjusted rates are useful for comparison purposes only, not to measure absolute magnitude. To measure absolute magnitude, crude rates are presented. To be consistent with the Healthy People 2010 Objectives, age adjustment was standardized by the direct method to the year 2000 standard U.S. population using the following age distributions:

a. 18-44, 45-64, 65-74, 75+
b. 18-24, 25-34, 35-44, 45-64, 65+
c. 50-64, 65+
d. 40-49, 50-64, 65-74, 75+
e. 18-44, 45-64, 65+
f. 18-44, 45-54, 55-64, 65-74, 75+

See Klein, RJ, Schoenborn CA. Age adjustment using the 2000 projected U.S. population. Hyattsville, MD: US Department of Health and Human Services, CDC, National Center for Health Statistics, 2001. Healthy People 2010 statistical notes, no. 20.
http://hlunix.hl.state.ut.us/ibisq/statnt20.pdf